

OPTICAL NOTCH FILTER APPARATUS AND METHOD THEREFOR**ABSTRACT**

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Known optical notch filter devices employing Surface Plasmon Resonance (SPR) do not completely filter out light of a predetermined wavelength from light from an optical source, because the light of the predetermined wavelength has a combination of polarisation states, namely the p-polarised and s-polarised states. In known device arrangements, if the light of the predetermined wavelength is to be completely filtered out of the light from the optical source, a secondary optical notch filter device has to be provided. The present invention overcomes these disadvantages and achieves complete filtration of light of the predetermined wavelength from the light from the optical source by providing a polarisation modifying element to rotate the state of polarisation of s-polarised light into p-polarised light that can be filtered by a single optical notch filter device employing SPR.